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## Laos

### Agricultural Situation

### Constraints and Opportunities for U.S. Agricultural Products

**2004**

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**Report Highlights:**

Laos is one of the poorest, least developed countries in the world. Tourism to this land-locked country is increasing and provides some market opportunities for U.S. agricultural products. The agricultural trade volume between the U.S. and Laos remains low, in part due to protective tariffs and transport costs.

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## Section I. Executive Summary

Laos is one of the poorest and least developed countries in the world. It depends heavily on rice and livestock farming, which accounts for at least 50% of GDP and employs over 80% of the people. About 30% of the population has insufficient food for more than six months each year and chronic malnutrition affects as much as 47% of the population. Despite these and many other problems, Laos' economy and society has advanced in recent years. Tourism is rising steadily and is expected to reach about one million visitors in 2002. Other new market opportunities are continuing to emerge due to the country's small but growing urban consumer base and the high proportion of young consumers in the country.

Laos' GDP growth in 2001 was 5.5%. Agriculture grew about 3.9%, while industry remained the fastest-growing sector, with construction, garments, and the services sector also playing key roles. Tourism continued to increase, contributing both to GDP growth and the balance of payments. Inflation was stable at 7.8%. Laos ran a trade deficit of about \$215 million in 2001. Exports totaled only \$325 million, while imports totaled \$540 million. The main exports are garments, wood products, minerals, hydroelectricity, and coffee. Fuel is the leading import. Unregistered cross-border trade in agricultural commodities with Thailand was also significant.

Laos is attempting to transform itself from being a "landlocked" country to a "landlink" between its Indochina neighbors. Another policy aim is to diversify its trading and investment partners to other countries in the region and away from its heavy reliance on Thailand. Laos applied for membership in the World Trade Organization in 1998 following its admission to ASEAN in 1997, but it is well behind Cambodia in taking steps needed to gain WTO access.

Although the U.S. is the second largest source of foreign investment in Laos (following Thailand), bilateral trade remains limited, due partly to the lack of normal trade relations between the two nations. That situation may change soon, however, with recent moves by the U.S. to normalize trade relations. Total U.S. exports grew to \$4.2 million in 2002 from \$3.6 million in 2001. U.S. imports from Laos have declined sharply over the past five years, falling from \$21 million in 1998 to just \$2.6 million in 2002. Most of this decline is due to lower imports of cotton apparel, which have fallen from over \$20 million in 1998 to only \$2.3 million in 2002.

Despite great strides in increasing agricultural output over recent years, there are no clear assurances that the country can attain near term food self-sufficiency, particularly in processed agricultural goods and higher value consumer products. Much of the domestic demand for these products is currently met by imports, mainly from Thailand. The high volumes of smuggled agricultural raw materials and production inputs are also a strong indication of the potential for greater agricultural processing within the country.

Total rice output, at over 2.2 million tons in 2000, was 3.5 times the output of vegetables, the second most important food source, and more than 5.8 times greater than the 378,000 mt of annual industrial crops produced in 2000. Sugar cane, corn, and various tubers are also important cash or food crops. Between 1996 and 2000, output of all crops jumped nearly 54%, from just over 1.5 million tons in 1996 to over 2.4 million tons in 2000. Much of this increase in output is due to steady increases in yield. To maintain production growth, there is enormous need for many types of agricultural production and processing equipment, as well as fertilizers, insecticides, seed, and other inputs.

The country's agricultural and food processing sector is exceptionally weak, with most food commodities sold raw and unprocessed. With the exception of a few large businesses, such as Gold Coin feedmill, Lao Brewery, and Wang Kanai Sugar, investment in agro-processing industries has been meager. Much farm produce is consumed locally or smuggled across the borders to Thailand, Vietnam, or China where value is added and it is sold at much higher prices. Due to its limited ability to add value to agricultural products, Laos is forced to import nearly all of its consumer goods, as well as key intermediate agricultural products. Low consumer purchasing power, poor infrastructure, a lack of adequate social and institutional systems, and limited access to credit are the main constraints to further development of the agricultural and food processing industry.

Laos' commercial food distribution system is not modern, but it is complex, particularly at the local and regional levels. This is mainly due to the surprisingly wide range of domestic and imported products being traded and the various channels in which these products are moving. This complexity is compounded by the fact that so many products are traded unofficially along the land borders, particularly with Thailand, Vietnam, and China. Traditional wet and dry markets still play a dominant role in the distribution of most food products that Laotians use on a daily basis. There are no supermarkets or other large retail outlets in the country, but small grocery-convenience stores are found in Vientiane, and increasingly in Luangprabang, Savannakhet, Pakse, and other regional centers.

The tourism industry is considered to be one of the most promising sectors of the economy, with good potential to generate both foreign exchange and incomes. About 700,000 tourists visited the country in 2001 and an estimated 1 million in 2002. This growth is creating a sizeable market for imported high value food products used by hotels and restaurants. Most of this trade is concentrated in Vientiane and Luangprabang. Expatriates living in the country, as well as middle and upper income consumers, are also an important and growing base of demand. These consumers are concentrated in the major cities and their number is estimated at not less than 200,000 nationwide.

There is also significant need for food aid due to Laos' high numbers of impoverished people, poor rural infrastructure, and flooding that often occurs in many areas. The UN World Food Program (WFP) is the largest recipient and distributor of food aid in the country, but many NGO's and other organizations are also active. In 2003, WFP projects that 5,172 tons of food, including 3,888 mt of grains (mainly rice from Thailand) and 1,284 mt of other foods, will be distributed through its programs.

Tariff rates on food and agricultural imports range from 5% to 40%. Processed food products are usually taxed at the 20% and 30% levels. Additional taxes and fees are also assessed. Tariff reforms will likely come as Laos steps closer to WTO membership, and particularly as it becomes more integrated into ASEAN and the ASEAN Free Trade Agreement (AFTA).

U.S. Laos bilateral trade in agricultural, forestry, and fishery products has been on a steadily rising trend in favor of the U.S., with a positive and strongly increasing net agricultural trade balance since 2001. U.S. exports of agricultural, fish, and forestry products to Laos jumped to over \$1.4 million in 2002. This was led mainly by bulk commodities, which are primarily used in food aid programs. Other U.S. exports include wine and beer, red meats, snacks, and forest products. U.S. imports of Laos' agricultural products have been declining sharply since 1999.

U.S. products with export potential to Laos include: 1) Bulk - corn-soy blend and other

foods for food aid, cotton; 2) Intermediate - soybean meal and other feed ingredients, livestock genetics and breeding stock, hops, malt, and other beer industry ingredients, vegetable oils; 3) Consumer - wine and beer, meats and poultry, snack foods, dry or canned fruits and vegetables, other grocery items.

## **Section II. Socio-Economic Situation**

### **2.1 Key Socio-Economic Indicators**

Landlocked Laos is one of the poorest and least developed countries in the world. It depends heavily on rice and livestock farming, which accounts for at least 50% of GDP and employs over 80% of the people. The population consists of 49 ethnic groups with four main linguistic families. These multi-ethnic people, who are generally scattered across the country, all have their own unique traditions, culture, and language.

In 1998, 39% of the population lived below the poverty line, determined by an estimate of minimum caloric needs. Poverty is not evenly distributed though. In the north, 53% of the population is poor compared with 12% in Vientiane prefecture. There are indications that economic growth has had a positive effect on poverty reduction, but the gains have not been equitable. Between 1993 and 1998, while per capita income grew by 25%, the proportion of poor people dropped only by 7%. Thus, the gains that the poor might have realized from economic growth have been less than those enjoyed by higher income groups.

These and other economic and demographic factors have made Laos' health and nutrition situation one of the most critical in Asia. Malnutrition is widespread, particularly among children and women who are chronically malnourished. The World Food Program (WFP) estimates that about 30% of the population has insufficient food for more than six months each year and thus experiences chronic food shortages. Some studies show that chronic malnutrition affects as much as 47% of the population.

### **2.2 Economic Overview**

Laos remains as one of the world's few Communist-led countries. From the Communist takeover in 1975 until the mid-1980's, the economy was centrally controlled and received heavy support from the Soviet Union and other Communist states. In 1986, as that external support dwindled, the government of Laos embarked on a campaign to open up the economy, decentralizing control and encouraging private enterprise.

While the country experienced remarkable growth in GDP from 1988 to 1997, averaging 7% per annum, Laos began its economic expansion from a very low base. Reform efforts slowed after 1998, and GDP growth fell to 3% per year. Southeast Asia's financial crisis in 1997 also severely affected Laos due to its heavy reliance on trade with Thailand. The government was also slow to adopt measures needed to restore macroeconomic stability. As a result, GDP growth averaged 7% from 1992-98, but fell to only 4.66% average growth from 1997-2001. GDP growth in 2001 was estimated at 5.5%, a decline from 5.9% in 2000. Slower export and agriculture sector growth and limited foreign investment offset the benefits of a substantial drop in inflation, greater macroeconomic stability, and a strong improvement in tourism.

Although Laos has achieved some notable economic success in recent years, the country is still among the world's least developed countries. Agriculture remains the foundation of the

economy. Foreign aid from numerous international donors and trade with neighboring Thailand, particularly exports of hydroelectric power, are also key components of its economy.

With the bulk of its trade concentrated within the region, Laos has struggled with the effects of the 1997 financial crisis, and it has lagged well behind other economies in the region. The post-crisis period has been marked by soaring inflation, during which the consumer price index jumped by more than 300% from June 1997 to June 1999. Over the same timeframe, there was nearly non-stop depreciation of the kip, which lost 87% of its value against the dollar. The economic situation and the currency have been somewhat more stable over the past two years.

The government's efforts to diversify its economy have progressed slowly despite the positive GDP growth since reforms began in 1989. This is mainly because agriculture comprises more than half of GDP and over 85% of the population remains engaged in subsistence agriculture.

GDP growth in 2001 was well balanced as agriculture, industry, and services all reported moderate increases in output. Agriculture grew about 3.9%, while industry remained the fastest-growing sector, with construction and garments also playing key roles. The services sector, which accounts for about a quarter of GDP, also saw steady growth of around 6% in 2001. Tourism continued to play an important role, contributing both to GDP growth and the balance of payments. Tourism has strengthened steadily every year since the mid-1990s.

As a result of better macroeconomic management, inflation was reported stable at 7.8% in 2001. This is a significant reduction from the very high inflation in 1998 and 1999 and is one of the lowest rates since the economy reopened to the outside world in 1986.

## **2.3 International Trade and Policy**

### **2.3.1 International Trade**

According to official figures, Laos ran a trade deficit of about \$215 million in 2001. Exports totaled only \$325 million, while imports totaled \$540 million. The main exports are garments; wood and wood products; minerals, such as tin and gypsum; hydroelectricity; and coffee. Unregistered cross-border trade in agricultural commodities with Thailand was also significant. Electricity and coffee exports have grown sharply in recent years. The range of goods manufactured for export is limited primarily to garments; wood and rattan products; and handicrafts. Fuel is the leading import. Export partners in 2000 were Thailand 20%, France 7.5%, Germany 5.9%, UK 4.1%, Belgium 4%. Import partners were Thailand 52%, Singapore 3.9%, Japan 1.6%, Hong Kong 1.5%, China 0.8% (2000). Trade with Vietnam is also likely to expand as Vietnam's economy grows and better road networks are established to its port facilities.

The above figures provide only a partial picture of the Lao economy. Actual trade figures are unknown, mainly due to the high levels of smuggling and unofficial trade along the country's long and porous borders. Illicit drug trade is also a significant component of the country's economy and international trade structure. Laos is the world's third largest illicit opium producer. The U.S. government estimated cultivation in 2002 at 23,200 hectares, a 5% increase over 2001, with production at 180 metric tons, down 10% from 2001. Laos is also a potential heroin producer, a transshipment area for heroin and methamphetamines

produced in Burma, and an illicit producer of cannabis.

Other obstacles that Laos faces in increasing international trade include:

- A lack of educated and skilled staff to develop income-generating activities and handle the collection, analysis and dissemination of information.
- A shortage of capital and skilled labor to install new technology equipment for production.
- A lack of reliable and up to date information on export-import business opportunities.
- The number of transportation companies within the country is limited and the cost is high for import and export transit services via Thailand. Consequently, Lao exports are not competitive.
- High import tariffs in many countries, particularly the EU and U.S.A., also make Lao exports uncompetitive.
- Small and medium enterprises lack experience in marketing and exporting.
- The quantity and quality of many products cannot meet international customer demands.
- Export transactions cannot directly be carried out; most are done through third parties.
- Trade groups and associations are not well organized or extended across the country.

### 2.3.2 Trade Policy

As one of the least developed countries in Southeast Asia and being surrounded by five neighbors, Laos is attempting to transform itself from being a “landlocked” country to a “landlink” between its Indochina neighbors. Another aim in this policy direction is to diversify its trading and investment partners to other countries in the region and away from its heavy reliance on Thailand.

Following its admission to ASEAN in 1997, Laos applied for membership in the World Trade Organization in 1998. However, Laos is well behind Cambodia in taking the steps needed to gain access to the WTO.

In an effort to reduce its import dependency and negative trade balance, the government is also seeking ways to promote production for domestic consumption and export, especially in targeted sectors such as agriculture, construction materials, and light industry. Part of this effort includes policies aimed at encouraging importers to develop plans for domestic production.

Although the United States is the second largest source of foreign investment in Laos (following Thailand), bilateral trade remains limited, due in some part to the lack of normal trade relations (NTR) between the two nations. That situation may change soon, however, with recent moves by the U.S. to normalize trade relations. Such a move would allow Lao goods to enter the U.S. at lower tariff rates, stimulate greater investment and economic activity, from garment production to silk weaving to handicrafts to sell to the U.S. market. This, in turn, would help create new jobs or protect existing ones in Laos. Under NTR, U.S. import tariffs on bamboo furniture would drop to zero from 60%, silk products to 7% from 65%, and rubber footwear to 3% from 35%.



### 2.3.3 Tariffs

The Lao import tax system aims to promote the import of materials and equipment for investment and production, while protecting domestic production and limiting luxury imports. Foreign investors are required to pay a 1% import duty on imports of machinery for production, equipment, and spare parts. Raw materials and intermediate goods needed for export production are exempt from import taxes. Raw materials and intermediate goods imported for import-substituting industries can be accorded special treatment based on an incentive agreement.

Customs regulations cover more than 3,500 products, with rates ranging from 5% to 40%. More than half of these products are assessed at the 5% tariff rate and many others are assessed the 10% and 20% rates. There are six rates of import tariffs:

- 5% for promoted goods, such as heavy equipment and machine tools;
- 10% for some medicines and materials used in light industry, such as fabrics and some chemicals;
- 20% for some food products, such as frozen fish;
- 30% for certain kinds of fruit and vegetables; and
- 40% for automobiles

Besides the import tariff, the government also imposes excise taxes on a wide range of products, with the steepest assessed on autos (from 72% to 104%, depending on engine size); motorcycles, beer and cigarettes (50%); and alcohol (60%).

In addition to the excise tax, importers may also face a turnover tax of 5-10% on many items. Most goods are assessed at the higher 10% rate; goods considered essential to domestic production (such as agricultural equipment, power tools, and construction equipment; fabric and cotton thread) are assessed at 5%. Tax exempt goods include rice, fertilizer, animal feed, fire trucks, and wheelchairs. The government is expected to introduce a value-added tax, which will eventually replace the turnover tax.

Reforms to many of these tariffs will likely come as Laos steps closer to WTO membership, and particularly as it becomes more integrated into ASEAN and the ASEAN Free Trade Agreement (AFTA). When the country became a member of ASEAN, it committed to gradually reducing most tariff rates to 0-5% by 2010 for trade with other ASEAN members. Along with Myanmar, Vietnam, and Cambodia, Laos committed to completely eliminate tariffs for nearly all products by 2015. The other six ASEAN members will eliminate their tariffs by 2010. Currently the decision making process with respect to AFTA mainly hinges on the timing at which different classes of goods will hit the 0-5% target.

### 2.3.4 Customs

Laos uses two types of customs valuations:

1. Valuation based on the transaction value of the imported item, which is usually based on the shipping invoice.
2. Valuation based on the certificate of the Lao embassy or a reputable organization having expertise on price and fair market value, such as the Chamber of Commerce of the country of origin.



If the importers cannot provide the required documents under these two systems, the customs valuation is based on domestic price (the so-called general price), minus 15%. Importers must also employ a certified customs specialist or certified customs clearance corporation to complete the report. Lao law does not require an origin determination for imported goods, but relies upon the rules of origin from other countries.

Customs administration is reported to have improved somewhat in recent years, but further training and reforms are badly needed. Setting up a low cost formal trade facilitation system is difficult, especially given the country's long and porous borders with five neighbors. New international trade arrangements, such as rules of origin requirements and preferential trading arrangements in ASEAN, make the task even more difficult. Limited resources also constrain the Customs Department in carrying out its duties. Civil service salaries are low, physical support facilities are inadequate, and management information systems are poor. Thus, there are high levels of bribery and smuggling. Port clearance and processing times are also erratic and tariff collection is significantly reduced. Due to Laos' lack of port facilities, these problems are compounded when importers and exporters must deal with customs officials in neighboring countries.

## **2.4 U.S.-Laos Trade Relations**

Bilateral relations between the U.S. and Laos have improved steadily in recent years. Full diplomatic relations were re-established in 1992 and the two countries have cooperated in a number of non-trade areas to improve bilateral relations.

As noted above, the U.S. has not yet extended Normal Trading Relations (NTR) status to Laos, but there are hopeful signs that trade relations will be normalized soon. The two countries have signed a Bilateral Trade Agreement that will take effect once NTR status has been granted by the U.S. Congress. A Bilateral Investment Treaty, initiated by the two countries, awaits final approval.

U.S. exports to Laos are likely to remain modest for the near term. The U.S. exported an average of \$3.95 million worth of goods to Laos from 2000-2002. Exports grew to \$4.2 million in 2002 from \$3.6 million in 2001. The main export items were agricultural products, telecommunications equipment, and automobile parts.

U.S. imports from Laos have declined sharply over the past five years, falling from \$21 million in 1998 to just \$2.6 million in 2002. Most of this decline is due to lower imports of cotton apparel, which have fallen from over \$20 million in 1998 to only \$2.3 million in 2002. Other products, such as coffee, beer, wood products, leather and furs, have also trended downward over the period.

## **2.5 Government Reforms**

The Lao People's Democratic Republic, established in 1975, is an authoritarian, one-party state ruled by the Lao People's Revolutionary Party. The 1991 constitution provides for freedom of speech, press, association, and religion, but in practice such freedoms are restricted.

In 1986, a series of decrees outlined a set of reforms called the New Economic Mechanism (NEM). These were aimed at creating a market-based economy. The NEM was formally announced and activated in 1988. It firmly established the role of the private sector in the Lao economy, opened up the economy, and decentralize some control. The constitution,

which was ratified in 1991, guarantees domestic and foreign ownership of property and explicitly encourages private business.

Since the NEM took effect and economic reforms began in 1988, about 90% of Laos' state-owned enterprises have been converted to other systems of management (many via leases) or have been liquidated. The government still sets production targets for the agricultural sector, as well as for some industries, and controls the price of goods such as cement and gasoline.

The NEM reform measures stimulated rapid economic growth from 1988 to 1997, pushing GDP growth to an average of 7% per annum. However, after eight years of sustained progress toward a more liberalized economy, reforms have slowed since 1996-1998 and the government has been slower to adopt measures needed to restore macroeconomic stability. This may be partly in response to rapid and large investment from abroad, particularly from Thailand. GDP growth has slowed along with the rate of reforms, but this has been primarily due to the regional financial crisis that began in Thailand in 1997.

## 2.6 Investment

The Lao government officially promotes foreign investment in nearly all sectors. However, corruption, bureaucratic delays, high costs, a shortage of skilled local staff, and the small size of the local market have all limited investment in recent years. All proposed foreign investment projects, no matter how small, are screened by the Foreign Investment Management Cabinet and must be approved by the Prime Minister's Office.

The government has approved nearly \$7 billion worth of projects since 1988, with hydropower projects accounting for more than 65% of that total. The value of approvals for new investment licenses declined by more than 90% from 1996 to 1998 (from \$176 million to just \$45 million), while foreign direct investment fell by nearly 75 % over the same period (from \$1.293 billion to just \$123 million). However, in 1999, approved foreign investment recovered 10.5% over 1998 to \$108 million. In 2001, foreign investment was estimated at just \$30 million, well below the levels in previous years. However, as of April 2003, the government reported that 64 foreign investment projects with a combined capital of \$283.6 million had been approved in the past six months. This is a tenfold year-on-year increase from 2002. For 1997 through 1999 agricultural and wood processing investments accounted for 41% of all investments, with manufacturing, transport, and communications comprising 16% and 19%, respectively.

Statistics for foreign investment licenses issued from December 1988 through February 1999 show that Thailand was the leading investor with 248 projects worth \$2.9 billion. The U.S. is the second largest investor with 41 projects worth nearly 1.5 billion. Other leading investors were South Korea (\$630 million), Malaysia (\$293 million), Taiwan (\$68 million), China (\$62 million), Australia (\$42 million), and France (\$37 million).

The reliability of all these figures, however, is uncertain because government statistics reflect only the value of investment licenses granted, not actual foreign direct investment flows. Accurate data on how many of these licenses have been implemented is difficult to obtain. The U.S. Embassy researched U.S. investments and found that of the 41 projects registered as U.S. origin by the Lao government as of early 1999, at least 25 were known to be inactive. The value of the licenses granted to U.S. projects that were in operation at the time was estimated at only \$7.6 million.

Public investment in Laos is largely directed toward infrastructure development, particularly

communications and road construction, agricultural and irrigation development, manufacturing and handicraft production, electrification, and water service installation. Education, health, and social welfare also receive sizable public investment. Together, development of infrastructure, industry, and agriculture accounted for nearly 75% of all public investment in FY 97-98. In FY 98-99 the proportion of public investment devoted to this sector dropped slightly to 70%.

Most of Laos' public sector investment is in the form of overseas development assistance. This foreign support accounted for 74% of total public investment in both 1996-97 and 1997-98, and over 90% in 1998-99. Laos expects to receive \$409.1 million in foreign aid in 2003, up from \$389.6 million in 2002. About \$252 million will be in the form of grants while the rest will be loans. Laos received grants worth \$240.22 million in 2002. The 2003 assistance will support efforts to develop industries and infrastructure, maintain macroeconomic stability, eradicate opium, and enforce narcotics laws. The main donors are the World Bank, Japan, the EU, the U.S., and multilateral agencies.

In an effort to cut Laos' dependency on imports and to help reduce its negative trade balance, the government is seeking ways to promote investment and production for both domestic consumption and export, especially in key sectors such as agriculture, construction materials, and light industry. Part of this effort includes policies to encourage importers to develop domestic production.

## 2.7 Infrastructure

Infrastructure within Laos is poorly developed, and many areas of the mountainous country are difficult to reach during the five-month rainy season (May-September). There is a huge need to improve and repair the nation's highway system. The government provides few funds for this, and is relying on bilateral or multilateral assistance projects and loans for most of the effort. Transport costs are high and are a significant barrier to increased trade, both domestically and internationally. As of 2002, there were about 24,000 km of roadways in Laos, less than half of which are paved, and many of which are in poor repair. The government has been making significant efforts to maintain national highway 13, which carries north-south traffic from the Laos-Chinese border to the Laos-Cambodian border. East-west highways and bridges linking Laos with both Thailand and Vietnam have also been a priority in providing an access to the sea. The Laos-Thailand Friendship Bridge in Vientiane and the Sedonh Mekong bridge near Pakse in Champassak province, plus numerous provincial bridges have been important infrastructure projects.

There is no railroad, but surveys have been completed for a rail route between Vientiane and Nong Khai in Thailand, as well as a Vientiane-Vietnam route to run along roads 12 and 9. Developing these rail links is a key long-term objective of multilateral lenders.

Despite its infrastructure limitations, transport in Laos has grown steadily at 45% per year. State-run freight and passenger transport companies have been transferred to private enterprises, encouraging greater use of its services. Improved management of land transport has been introduced, including upgraded border crossing routines. Laos has signed a series of cross-border accords with Vietnam, China, and Thailand, and has joined the ASEAN border crossing accord. As a result of all these measures, the number of freight and passenger vehicles has increased steadily in recent years.

The country has 51 airports, but only nine with paved runways. Two of the airports offer limited international service to countries within the region. Only about 20% of the

population enjoys electricity. Telephone service to the general public is limited but improving, with over 28,000 telephones currently in service and an additional 48,000 expected by 2001.

Hydropower is an important source of foreign currency for Laos. However, there have been recent calls for the government to proceed more cautiously in developing this sector. Critics cite the need for a more careful account of environmental considerations and the demand for electric power in neighboring countries, as well as the need to promote industries other than electric power for export.

## 2.8 Outlook

Despite the many difficulties facing the Lao economy, there is hope for the future. The country became a member of ASEAN in 1997 and will benefit from trade and economic assistance from the other members of the free trade association. The government has undertaken some economic reforms and is introducing a free market economy. Continued financial and economic reforms, along with political interaction with other ASEAN countries, should spur further economic growth.

The economic outlook is generally positive due to the anticipated economic recovery of the region and increased investment in the hydropower and mining sectors. GDP growth is expected to be over 6% and inflation is expected to fall to under 6% in 2003. Exports are expected to increase by around 9% in both 2002 and 2003 and tourism is also likely to continue growing. Both government revenues and expenditures are expected to rise modestly in the medium term, with revenues expected to reach about 15% of GDP and expenditures forecast to rise to 22.8% of GDP by 2003.

## Section III. Food and Agriculture Overview

### 3.1 Regional Perspective

Table 1 compares Laos' crop, livestock, and fisheries production with its Indochina neighbors. For most of these products, the country ranks near the bottom in total output. Only in sweet potatoes does Laos hold a second rank position against its regional neighbors.

**Table 1: Agricultural and Fisheries Production in Indochina**

	Cambodia	Laos	Thailand	Myanmar	Vietnam
Crops					
Cassava (mt)	131,052	71,000	18,283,000	96,818	2,050,300
Maize (mt)	173,718	117,000	4,673,000	350,000	2,117,900
Rice, Paddy (mt)	4,099,016	2,201,700	25,200,000	20,600,000	31,925,400
Sugar Cane (mt)	167,100	296,960	49,070,000	5,893,657	15,089,000
Sweet Potatoes (mt)	25,963	117,500	90,944	57,382	1,610,000
Tobacco Leaves (mt)	7,748	33,400	74,200	48,161	28,800
Vegetables (mt)	470,000	255,200	950,000	2,800,000	4,350,000
Livestock					
Buffalo (head)	625,907	1,008,000	1,900,000	2,500,252	2,950,000
Cattle (head)	2,868,727	1,100,000	6,300,000	11,218,159	4,200,000
Chicken ('000 head)	15,251	14,000	190,000	48,269	150,000
Duck ('000 head)	46,000	17,000	23,000	62,000	57,000
Pig (head)	2,118,273	1,500,000	8,300,000	4,138,912	20,200,000
Fisheries					
Total fish catch*	284,100	60,403	3,607,707	945,827	1,794,910
Total marine fish catch*	28,100	-	2,340,433	695,904	777,000

Note: \* = 1999

Source: FAO

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### 3.2 Agricultural Production Situation

As shown in the tables and figures below, Laos' production of food crops and livestock has grown steadily over the past decade. Endowed with large tracts of arable land and ample rainfall, the country has strong potential to increase its importance as an agricultural and forest products supplier. Its proximity to large and growing markets, particularly China, Thailand and Vietnam, also presents opportunities for Lao exporters.

Despite the great strides in increasing output over recent years, there are no clear assurances that the country can attain near term food self-sufficiency, particularly in processed agricultural goods and higher value consumer products. Much of the domestic demand for these products is currently met by imports, mainly from Thailand. The high volumes of smuggled agricultural raw materials and production inputs are also a strong indication of the potential for greater agricultural processing within the country.

Other factors limiting the agricultural sector include unclear land ownership, poor irrigation infrastructure, inadequate transportation, inefficient marketing, poor farming practices (especially slash-and-burn cultivation), limited producer access to technology and capital, and inadequate public and private sector support services. The government, international donors, and NGOs are well aware of these limitations, as well as agriculture's growth potential and its important role in reducing rural poverty. As a result, the sector is receiving high priority for support at many levels.

Reducing slash-and-burn cultivation, which is still practiced by some 300,000 farmers nationwide and threatens future productive potential, is a priority of the government and international donors. The Ministry of Agriculture and Forestry's Rural Development Committee reports that about 250,000-300,000 hectares of land, of which 100,000 are rain forest, are cleared by slash-and-burn every year. In an attempt to reduce the damage to land and forest resources, the government has begun a land reallocation program in which upland families are provided with up to four pieces of land, from 1 to 1.5 hectares each, depending on family size. A national Lao-IRRI Project also encourages farmers to stay on their land and stop slash-and-burn in new areas. The program urges farmers to grow rice on only one parcel of land at a time and to rotate non-rice crops such as corn and mungbean on the other plots, or leave them fallow.

The country's food supply is still very much based on cereals, particularly rice. In fact, total rice output, at over 2.2 million tons in 2000, was 3.5 times the output of vegetables, the second most important food source, and more than 5.8 times greater than the 378,000 mt of annual industrial crops produced in 2000. Sugar cane, corn, and various tubers are also important cash or food crops.

Laos has achieved impressive increase in crop output since 1996. Between 1996 and 2000, output of all crops jumped nearly 54%, from just over 1.5 million tons in 1996 to over 2.4 million tons in 2000. Much of this increase in output is due to steady increases in yield. Increases in harvested area also contributed to the growth.

Continued gains in food production are essential to supply the estimated 30% of Laos' population that is short of food and the nearly 50% who are malnourished.

### 3.2.1 Rice

Rice, mainly glutinous type, is the most important crop nationwide and is a staple food in the Lao diet. Annual production has climbed from about 660,000 tons in 1976 to over 2 million tons in 2000. Most of this increase in output has been due to increased yields, which increased 150% between 1976 and 2000. A 37% increase in area over the period also contributed to increased output. Irrigated, dry season rice is growing in importance relative to lowland and upland paddy in increasing national rice output. Dry season paddy production was negligible in 1976, but in 2000 it accounted for 18% of total production. Here again, most of the increased output was due to yield increases, which jumped 235% for dryland rice over the 24-year period. By comparison, average yields of lowland and upland paddy increased 129% and 72%, respectively, over the period.

### 3.2.2 Corn

Laos' corn production has also shown impressive increases since 1976. Total production jumped 285% between 1976 and 2000, led mainly by an average yield increase of 132%. Most of this yield jump was probably due to the use of new seed hybrids and fertilizer that became more widely available from Thailand during the last 10 years. This also helped to boost planted area by 67%, which further contributed to increased national output.

Most of Laos' corn production is feed-grade yellow corn grown in the northern and central regions. Xiengkhuang, Huaphanh, Xayabury, and Luangprabang are the largest producing provinces and accounted for 46% of total production in 2000. Nearly all of the total annual production is grown during the rainy season (May-October), but there is some dry season production.

Much of this corn is used for local animal feed by Gold Coin DN (Lao) Co. Ltd., a feed mill near Vientiane that supplies the livestock sector (see Feedmilling section below). Some corn is also exported to Thailand for the feed milling industry. Most of this trade is unofficial, so it is difficult to obtain accurate information about volume, prices, and quality.

### 3.2.3 Tubers (Starchy Root Crops)

Tuber crops include mainly sweet potatoes, tapioca (cassava), and potatoes. Production has been generally stagnant, at about 200,00 tons per year, even though harvested area has been trending upwards for several years. Average yields have been declining, reaching about 4.5 tons per hectare. This indicates a typical pattern in many developing countries where tubers are a staple food crop in many rural areas, but farmers lack capital to fertilize their crops to maintain soil fertility and yields. Production is fairly evenly divided across the north, central, and southern regions, but nearly 60% of total production in 2000 was concentrated in Luangprabang, Borikhamxay, Saravane, and Sekong provinces.

Sweet potatoes and potatoes are commercially traded in local and provincial markets throughout the country, but virtually all the production is used in homes as food. There are no known processing markets for these crops other than backyard producers.

There is no sizable cassava processing industry in the country, particularly for native or modified starch, so most of the production is used for various foods domestically. Some sources report that tapioca from Laos is sometimes sold to buyers in northeast Thailand for



further processing. No estimates are available for the size of this trade.

### 3.2.4 Mung Beans

Mung bean is an important tropical pulse crop that is grown in lowlands in rotation with rice, or in uplands in rotation with corn and other grain crops. It is used in a wide range of local foods. Although there is excellent market potential for this crop in many Asian regional markets, Laos has yet to fully exploit these opportunities. Production has been generally declining for several years and fell nearly 14% in the 1996-2000 period compared to the previous five years. Output was only 1,100 tons in 2000, less than half of the peak production of 2,600 tons in 1990.

Mung beans require relatively high moisture, so most of the production is during the rainy season. Over half of the production is in the northern region, with Luangnamtha, Luangprabang, and Huaphanh the leading provinces. Vientiane province and also Attapeu province in the south also produce relatively large volumes.

There are no reports of mung beans being exported, but the market demand is high in neighboring Thailand and China, so there could be some unofficial exports.

### 3.25 Soybeans

Laos' soybean production has been on an upward trend since 1997, although total output of 5,400 tons in 2000 is insignificant by regional and world standards. Most of the higher output is due to increased area, particularly in Champasack province in the south, where production jumped 23% in the 1996-2000 period. This province accounted for over 20% of national production in 2000, with Luangprabang adding another 25% of total output. The remaining production is spread throughout the country.

Average yields have improved slightly in recent years, but the gains are not impressive and are very low even by regional standards. This reflects poor crop management and limited access to new seed varieties and other production technology.

Most of the country's soybean production is used domestically for local food consumption (sprouts, soybean drinks, tofu, and some vegetable oil). At this point, no local crushers of any significance exist in the country, so domestic production of soybean meal and oil is very small.

An increasing amount of soybean is being used by the livestock feed industry. Some of this trade is for local use by the feed miller near Vientiane. However, the rapid increase in production in Champasack province, which is now linked to Thailand by a new bridge, suggests that most of the output in that region is unofficial border trade.

### 3.2.6 Peanuts

Although peanut is considered an oilseed crop in many countries, in Laos it is primarily traded in local markets and consumed as a food crop in a wide variety of local dishes. Production in 2000 was about 13,200 mt from 12,800 hectares, a similar level to the previous year.



Production is concentrated mainly in the northern and southern regions, with the north accounting for about 6,000 mt annually, roughly half of nationwide output. Xayabury and Huaphanh dominate production in this region. Saravane province in the south increased peanut output by over 38% in the 1996-2000 period. Output in 2000 was 4,200 tons, up sharply from the 837 tons produced in 1995, mainly due to increased harvested area.

### **3.2.7 Tobacco**

Tobacco ranks second behind sugar cane in importance to Laos' industrial crop production and is an important cash crop in nearly every province. Production has been stagnant at about 25,000 to 30,000 mt annually since 1995. Output in 2000 was about 33,400 mt from a total harvested area of about 6,700 hectares. The central region provinces of Vientiane, Borikhamxy, Khammuane, and Savannakhet led nationwide production with over 19,000 mt, or nearly 60% of total output. Oudomxay and Luangprabang in the north, as well as Champasack in the south are also important producing areas.

### **3.2.8 Cotton**

Cotton production has been declining steadily since output peaked in 1995 at nearly 9,000 tons. The 2000 crop was only 4,600 mt. Reduced harvested area is the primary reason for this fall in production, even though average yields have shown encouraging increases nearly every year since the mid 1980's. The northern region usually accounts for at least half of Laos' annual cotton production, with Xayabury province the main center of production. Savannakhet and Saravane are also important producing provinces.

There is a long tradition of cotton textile production among Laos' many hill tribes, so most cotton is used locally. Normalization of trade relations with the U.S. and the adoption of new pest-resistant seed varieties and other crop protection measures could encourage local producers and stem the fall in output seen in recent years.

### **3.2.9 Coffee and Other Permanent Crops**

The French introduced commercial coffee production to Laos in the 1930's and it has been a permanent crop in some areas of the country since that time. Laos' coffee output has rapidly risen over the past 25 years. Production increased nearly 10 fold between 1976 and 2000, from just 2,780 tons in 1976 to 23,500 tons in 2000. Large expansion of new plantings on the Bolavens Plateau region of Champasack and Saravane provinces in the south accounted for most of the increase in production. Adoption of new, higher yielding varieties of both Arabica and Robusta types added to rising output. About 20% of the coffee grown in the Bolavens area is now Arabica, but this is expected to increase to 50% as new trees mature. Many of these new varieties were developed and tested by the Ministry of Agriculture and Forestry's Coffee Research Center on the Bolavens Plateau east of Pakse. The Arabica crop is harvested from August to November, while Robusta is harvested between December and February.

Although the Bolavens is known to produce fine quality coffee, most Lao producers have not gained much from their efforts to produce more of this high value cash crop. Vietnam, Brazil, and other large world producers have increased their production areas even more than Laos, so prices have sunk to record low levels over the past several years. The outlook is not good that prices will recover significantly anytime soon. Local producers note that in past years one kilogram of coffee beans could purchase five kilograms of rice. Now, one kilogram of coffee buys only 1.5 kilograms of rice.

There are few reliable statistics for Laos' other permanent crops. The UN Food and Agriculture Organization estimates the following crops and areas for 2001: bananas 2,500 ha; mangoes 300 ha; oranges 3,800 ha; and pineapple 3,300 ha.

### **3.2.10 Sugar Cane**

Sugar cane is Laos' third largest crop in terms of total tonnage and the most important industrial crop. Domestic demand for sugar totals about 25,000 tons annually, so most of the country's requirement is supplied from Thailand. Laos' cane production in 2000 was nearly 300,000 tons from 8,400 hectares nationwide, with the northern and central regions accounting for 93% of output. Four provinces, Phongsaly, Luangnamtha, Vientiane, and Borikhamxay, accounted for over two thirds of total production in 2000. Remaining production is spread across all other provinces. Chart 15 shows the rapid increases in sugar cane area, yield, and production since 1997. During the 1996-2000 period area increased over 25%, yield increased nearly 9%, and production was up nearly 37%. Strong demand and attractive prices from sugar processors were no doubt key factors in this expansion.

The Wang Kanai Group, Thailand's second largest sugar processor, is currently building its second sugar mill in Laos to fill current and expected local demand, and to export to other Asian markets. The new 15,000-ton mill near Vientiane started construction in 2002 and will be operational by mid 2005. Plans are to spend another 350 million baht to double capacity within five years. The company's current sugar mill in Laos has a capacity of just 1,000 tons per year and serves only the Vientiane area.

Wang Kanai sees Laos' sugar market opening up significantly with freer trade under new WTO and AFTA agreements. They also expect the new highway running from Vientiane to Danang, Vietnam, will greatly facilitate exports from Laos. Until then, Laotian exports will continue to move through Laem Chabang port in Thailand. The new plant will also operate under an OECD subsidy program, which allows members to export sugar under quotas allocated to developing countries at prices higher than the normal market.

Two key factors limit sugar production in Laos. One is rugged topography, which limits local production area. The second is inadequate labor. Already, Wang Kanai is using some imported labor from Vietnam for its operations in Laos.

### **3.2.11 Vegetables**

In terms of total crop output, vegetables rank second only to rice as an important food crop for Laos. Vegetables are of course important local food crops for much of the population, but domestic production is inadequate to meet nutritional demands nationwide. Annual cultivated area jumped over 60% from 1996 to 2000, from 14,000 hectares in 1996 to nearly 105,000 hectares in 2000. Total production during the period was up over seven fold to 636,000 mt from just 89,000 mt in 1996. Yields declined over the same period.

Compared to other crops in Laos, vegetables are fairly widely grown and at least some production is recorded in every province. The highest production areas in 2000 were the central region provinces of Vientiane city region (103,000 mt), Savannakhet (93,000 mt), Borikhamxay (78,000 mt), Vientiane province (70,000 mt), and Champasack (57,000 mt). Most vegetable production is during the rainy season and is spread across all provinces. Dry season production is mainly concentrated in the largest producing provinces noted above, as well as irrigated areas. The main vegetable crops include cucumbers, cabbage, cauliflower, eggplant, yardlong bean, tomato, Chinese cabbage, and mustard.

Despite their widespread cultivation, vegetables produced in Laos are still inadequate to meet the nutritional demands of consumers. Several production problems, including poor seed quality, limited pest management, inadequate water resources, high local labor costs, the low technical skills of farmers, and the high costs of fertilizer, pesticides, and seed, are the main causes of this situation.

In spite of these limitations, there are some exports of Lao tomatoes and other vegetables to Thailand for processing. These ventures are still limited in scope and are more indicators of future opportunities. More effort must be made at the production level, as well as on post-harvest factors such as phyto-sanitary procedures, pesticide residues, improving processing and distribution infrastructure, and marketing and promotion.

### **3.2.12 Livestock and Poultry**

Much like the rest of Laos' agricultural base, the country's livestock system is still very under-developed and oriented mainly to home consumption or local markets. Government sources report that smallholders own more than 95% of the national livestock herd and account for 86% of total production. Despite concerted efforts from the Lao government and foreign donors over the last three years, many infectious and parasitic diseases are causing heavy mortality and morbidity of the livestock herds. Foot and Mouth Disease (FMD), Haemorrhagic Septicaemia (HS), Classical Swine Fever (CSF), Newcastle Disease (NC), and many other diseases are still endemic in Laos. However, even in the face of these many problems, Laos' livestock and poultry sector is slowly beginning to develop, at least in certain key markets around Vientiane and other major cities.

Both private and government sources admit, however, that developing a commercial livestock sector will be difficult under current conditions due to the low purchasing power of Lao consumers, the lack of economies of size and scale in the industry, poor disease control, inadequate feed supplies, undeveloped processing and marketing facilities, and other problems.

#### **Cattle**

The combined populations of cattle and buffalo in Laos totaled nearly 2.3 million head and about 60% of the Laos' large animal population in 2001. Cattle are found throughout the country, but most of the numbers are concentrated in the central region, particularly Savannakhet (240,000 head in 2000), Xiengkhuang (119,000), and Vientiane (108,000). Champasack province in the south is also a leading cattle area, with 129,300 head in 2000.

Buffalos are more evenly distributed, with the 2001 northern region population at about 625,000 head, the central region at 598,000, and the south at 201,000. The largest producing provinces in the north are Huaphanh (155,500 head), Luangprabang (126,200 head), and Xayabury (100,000). The leading central region provinces are Savannakhet (213,000 head) and Vientiane municipality (102,000).

The beef meat and dairy industries are not well developed, with most of the national bovine population being used for either draft purposes, home milk consumption, or local meat supplies. It's notable that some beef cattle ranches have been developed over the past decade or more by Lao and foreign investors. However, these investments have generally not succeeded due to a wide range of problems.

There is also very significant border trade in cattle from Laos and Vietnam into Thailand. Lao government officials note that this has been a tradition for more than 200 years. They estimate this trade currently totals at least 200,000 head annually, and that Thailand's cattle imports (official and unofficial) from Burma, India, and Bangladesh total another 600,000 head per year. This trade is driven by Thailand's relatively high consumer incomes and greater demand for meat. The mechanization of Thai agriculture has also caused a decline in domestic buffalo numbers, so beef demand has increased as a result. Thailand high tariffs of 11% on live animals and 60% on meat cause much of this trade to be unofficial, and thus complicates disease control measures on both sides of the border.

Commercial dairy production in Laos is very limited, but has significant potential for expansion with proper government and private sector support. The Burapha Group, a Scandinavian-Lao firm with many years of experience in the country, currently operates Nabong Dairy Farm near Vientiane, the only known commercial dairy in the country. The farm was originally a Cuban agricultural project owned by the Lao government. It was later privatized in the early 1990's. The business currently produces about 1,000 liters per day from about 150 cows, some of which are improved breeds imported from Thailand. Concentrate feed is also imported from Thailand. Productivity is rather low at only 10-14 liters per cow per day. The milk is pasteurized, but as of early 2002, only about 500-600 liters per day could be sold in the local market around Vientiane. This is mainly due to the low purchasing power of Lao consumers, particularly following the 1997-98 economic crisis. The company is considering establishing a UHT packaging facility to broaden its processing capabilities and the market range for its finished products. Despite Nabong's problems, the firm's management sees good future opportunities for dairy in Laos, particularly with the proper government support toward milk processing and marketing, especially school feeding programs.

Several government and private sector individuals interviewed for this study highlighted the potential for beef and dairy production and processing. Much of the country's rugged terrain is far more suited for cattle production than it is for crops, particularly in the Plain of Jars in Xiengkhuang province, as well as the Bolavens Plateau in the south. These sources noted that in the early 1900's during the French colonial period, there were 30,000 head of beef cattle produced in the Plain of Jars. These cattle were sent three times each year to Vietnam's port city of Vinh for slaughter and marketing (mostly to Hong Kong). The numbers fell to just 5,000 head in the 1970's. Reviving this trade will require significant investments, particularly improvements to soil, grasses, and livestock herds using improved technology.

## Hogs

Pork is a favored meat throughout the country and pigs are produced in every province. Despite the widespread demand, pig production is still relatively small. The industry contracted sharply after the economic crisis of 1997 and it only began to recover in 1999. Discussions with the country's only local feed miller in Vientiane suggest that this sector appears to be in the early stages of taking off into a more intensive commercial business, particularly near larger urban centers where purchasing power is expanding.

According to Ministry of Agriculture and Fisheries statistics, production is most heavily concentrated in the northern and central regions, and around the major urban centers. Five provinces lead production nationwide. They include Savannakhet and Vientiane municipality in the central region, with 212,700 and 102,000 head, respectively, in 2000. In the north, the leading provinces are Huaphanh (155,500 head), Luangprabang (126,000), and Xayabury (100,000).

## Goats and Sheep

Goats and sheep comprise the smallest population of all the large domestic animals in Laos. The nationwide population in 2000 was estimated at only 121,000 head. Most of the population is concentrated in the north and central regions. Khammuane province in the central region is the leading producer with nearly 35,000 head in 2000. In the north, Luangprabang, Huaphanh, and Oudomxy are the leading producing areas with 21,400, 13,000, and 12,000 head, respectively. Most goats and sheep are consumed or marketed locally.

## Poultry

Poultry comprises the highest total number of livestock animals in Laos, with over 14 million head in 2001. However, most of this production is of local breeds that are used for both meat and eggs. The local broiler and layer industry is still quite small and concentrated nearby the main urban centers, so there are few improved poultry breeds used in the commercial business at this time. However, several sources noted that the layer business in particular has been expanding in recent years and that new opportunities are emerging to supply that industry. The poultry population expanded sharply from 1980 until about 1995. There was little growth until 1999, but numbers have started to expand since 2000. Poultry production is common in every province, but in 2000, it was most heavily concentrated in Vientiane municipality and Vientiane province (3.2 million head combined), Savannakhet (1.6 million), Champasack (1.4 million), and Xayabury (1.3 million).

### 3.2.13 Fisheries and Aquaculture

Production from fresh water fisheries and aquaculture is an important primary food resource for Laos, providing a large portion of protein intake in many areas, particularly along the 1,835 km stretch of the Mekong River that flows through Laos. The Mekong's 14 tributaries are also important fisheries. The industry is generally small-scale and oriented mainly to home consumption or local markets, mainly due to inadequate processing and distribution infrastructure and lack of capital.

Estimates from Laos' Ministry of Agriculture and Forestry suggest that inland fisheries, in combination with aquaculture, yielded 73,000 mt in 2001. Fish capture along the Mekong River, its tributaries, and in large reservoirs comprised a total area of over 211,000 ha and produced an estimated 21,000 tons. Smaller reservoirs and swamps totaling 130,000 ha produced an additional 8,000 tons. Aquaculture in ponds, cages, rice fields, natural reservoirs, and canals totaled over 500,000 ha and generated an estimated 44,000 tons.

Aquaculture facilities and smallholders are supplied with fingerlings by 30 small hatcheries, including 17 local authorities and 13 private companies. Estimated output from these hatcheries was estimated at about 185 Million fingerlings in 2001. Another 15 new hatcheries are currently starting production or will be established during the next 5-year plan (2005-2010). The government's policy goal is to produce enough fingerlings for greater promotion of rural aquaculture and to increase the fish consumption rate from 10 kg per capita in 2000 to 23 kg for rural and 33 kg for urban consumers by 2020.

### 3.2.14 Feed Milling and Livestock Production Inputs

Gold Coin DN (Lao) Co. Ltd. is the only feed mill in the country. The facility was formerly a government-owned facility built with eastern European technology after 1975. In the early 1990's, operation of the mill was shifted to private investors. The mill is now 90% owned by Gold Coin feedmills, part of the Zeullig Group, and 10% Lao shareholders who are reportedly linked to senior political officers. The mill is located near Vientiane and produces feed for poultry, pigs, cattle, and fish. The mill has about 4,000-5,000 metric tons of storage, as well as a dryer to handle purchasing of local raw materials.

Company officials say that nationwide demand is about 1,600-1,700 mt per month for finished feeds, plus another 300 mt monthly demand for concentrates. Combined total feed demand nationwide is thus about 2,000 mt per month.

As of mid 2002, Gold Coin was selling about 1,200 per month, although their monthly plant capacity is about 5,000-6,000 mt. The approximate 800 mt difference is being supplied by Thai feed producers, particularly CP's plant in Mukdaharn province, which supplies a sizable share of the demand along the Thailand-Laos border. Much of this feed crosses the Mekong unofficially. The lack of tariffs, in combination with the lower raw material costs in Thailand, makes this smuggled feed from Thailand very price competitive with Gold Coin's products. Gold Coin managers report that they typically price their feeds about 10% over raw material costs, but even then they must sell at prices 10-15% over feeds supplied from Thailand.

Gold Coin relies on soybean meal, meat and bone meal (MBM), rice bran, and corn as their main raw materials. About 95% of these materials are imported. Their monthly demand for soybean meal is about 300-400 mt. Most of this imported from Singapore, as the price for Thai origin meal is about \$20-30 per mt more than from Singapore. Another 200-250 mt per month of MBM is imported from India and Australia.

The company uses local corn when supplies, costs, and quality are acceptable. In 2002, they bought about 1,200 mt of corn during the main season harvest from July through October, and another 4,000-5,000 mt during the late harvest in November-December. Typically though, local corn is either unavailable or too high priced to work in feed rations, particularly from April through July. Laos' late corn harvest is also in high demand in Thailand and China. As a result, corn from Thailand is often cheaper than local corn. The Gold Coin manager noted that current prices in early 2002 were 1,254 kip/kg for Thai corn as compared to local corn at 1,300. They also pointed out sharp regional price differences. At one point, corn near Vientiane was priced at 600-750 kip per kg, while in the south the price was 1,000 kip. Whenever and wherever local corn is purchased, the quality must be carefully checked.

Gold Coin has similar factors in buying local rice bran. Supplies usually dry up by the end of March each year and there are sharp price differences in various quality levels. In February 2002, normal rice bran was offered at 600 kip per kg, while fine grade was priced at 1,000-1,200 kip.

Vitamins, minerals, and other additives are 100% imported, mainly from Thailand.

To more effectively compete with the Thai feed millers, Gold Coin has been concentrating on the Vientiane market area, where it most competitive, as well as on exports to Vietnam. A key objective is to double the Vientiane area demand and increase their brand presence in



that market. They are concentrating on using their company-owned farm to offer better training and technology support to farmers and offering credit terms to qualified dealers. However, low education among farmers, dealers, and local staff limits market development.

Gold Coin officials cited interesting recent survey results about Lao consumer demand for meats. Consumers ranked beef, duck, poultry, fish, and pork in order of preference as their preferred meats. Beef was apparently ranked highest in preference among 70% of the consumers surveyed. This indicates good opportunities for local as well as imported beef. However, better genetics, improved feeding, and most of all, improved consumer buying power will be need to expand the industry.

About 75% of Gold Coin's poultry feed is sold around Vientiane, with the rest marketed nationwide. They note that layer feed demand is growing well, mainly due to egg prices reaching 14,000 kip per kg around Vientiane.

Feed demand for pigs is limited, apparently because pork is commonly smuggled from Thailand because production costs are cheaper there. This depresses pork prices and makes it difficult for Lao producers to compete.

Some of the leading livestock and poultry farms in the Vientiane area include Norman Chap Farm, Long Teng Farm, and Nongkhai Farm.

Feed sales for fish and other aquaculture have reasonable sales, but there are limits to expanding this business due to impacts of the dry season on many of the natural fisheries and water supplies for aquaculture.

Gold Coin's main problems relate to logistics and red tape in importing raw materials from or through Thailand. Although tariff issues are not a serious problem, it is necessary to pay government officials to allow imports. There is also \$20 per mt added freight costs for products that must transit through Thailand. Company officials cited the cost of shipping grain or other ingredients from Malaysia to Laos at \$40 metric ton, which is well above the price of shipping the same products from the U.S. to Malaysia. They are hopeful that a new Bangkok to Vientiane rail link will reduce costs and make imports easier.

Truck shipment of feeds to Vietnam is reportedly far less difficult due to an arrangement between Vietnam and Laos. Under that deal, shippers that send 100 metric tons of freight to Vietnam have an obligation to buy 100 metric tons from VN. The arrangement is done on a tonnage basis, with the objective to keep trucks filled and operating efficiently in both directions.

Despite the many difficulties in doing business in Laos, Gold Coin sees opportunities and long term market potential.

### **3.2.15 Forestry and Forest Products**

Laos' 111,000 square kilometers of forests are some of the country's most abundant resources. They comprise a variety of timber tree species such as Khagnoung, Khamphi, Dou, Eaglewood and Longleng. The forest regions are also rich in non-timber products such as shellac, benzoin, cardamon, pine resin, rattan and medicinal plants.



Over the past 10-15 years, these resources have been exploited heavily, usually with little or no control. In recent years, mainly due to pressure from international donor agencies and NGO's, the government has enacted legislation to better manage and control this sector. It remains to be seen whether or not these regulations have a positive long term effect in sustaining forest resources.

There are few reliable government statistics available on the forestry or forest products industry, mainly due to the high levels of illegal logging and trade that takes place along the borders, particularly with Thailand, Vietnam, and China. Ministry of Agriculture data shows a generally increasing trend in forest plantations, a sizeable share of which is eucalyptus. The increase in plantings and the total 76,200 hectares planted between 1980 and 2000 are positive developments. However, this is just a tiny fraction of the logging that has been done in recent years.

### **3.3 Agricultural Production Inputs**

Throughout the country, there is enormous need for many types of equipment, such as water pumps and other irrigation equipment; tractors and tilling equipment; and rice milling, drying, and packaging equipment. More and better fertilizers, insecticides, seed, and other inputs are also needed, as are more effective financial credit systems.

Transforming these needs into effective market demand and a more viable agricultural system is a much more difficult problem, however. Low spending power, poor transport infrastructure, high energy costs, weak information systems, distrust between buyers and sellers, and limited business development skills are all factors limiting the development of the input supply system.

Despite these limitations, many of the most important inputs are already being supplied by NGOs and private agribusiness supply shops in major towns and villages. This network is slowly growing into less populated areas.

Greater investment and cross-border trade (both official and unofficial) by Thais, Vietnamese, Chinese, and other nationalities is also helping to develop the local dealer and supply network. Although most of the existing dealers are far less developed than in neighboring countries, they are an important element in providing the marketing and information links between input producers and farmers. These dealers also play an important role in providing credit and local markets for produce. Significant efforts are also being made to provide better seed to producers, which has proven to be a key step in the economic development of many other Asian countries.

Almost all fertilizer is reportedly imported from Thailand or Vietnam, so there are significant opportunities for bulk imports and local blending and distribution. Here again, the problem is mainly in the distribution, which is very difficult due to the poor infrastructure. Another problem is the lack of good soil testing facilities to determine fertilizer needs.

### **3.4 Agricultural and Food Processing**

Laos' agricultural and food processing sector is exceptionally weak, with most food commodities sold raw and unprocessed. With the exception of a few large businesses, investment in agro-processing industries has been meager. Much of the farm produce is

either consumed locally or is smuggled across the borders to Thailand, Vietnam, or China where value is added and it is sold at much higher prices. Due to its limited ability to add value to agricultural products, Laos is forced to import nearly all of its consumer goods, and even key intermediate products, such as processed soybean meal and other inputs for the livestock industry.

The main domestically processed products include milled rice; smoked, dried, fermented, or salted fish; and fermented and semi-processed vegetables and fruits. Most of these products are processed in small scale businesses and sold in local markets.

### **Lao Brewery**

Lao Brewery is the major agricultural products processor in the country. One of Thailand's leading business groups, the TCC Group, which controls Carlsberg Brewery in Thailand, recently acquired a 50% stake in Lao Brewery. The remaining shares are held by the Lao government. Lao Brewery has recently upgraded its factory by adding a new automatic brew house and new packaging lines. Current annual production is 600,000 hectoliters, with a capacity of one million hectoliters. As the only brewery in the country, it has a 98% market share. The company produces bottled, canned, and draft beer, and has recently started producing light and strong beer (5% alcohol by volume). In 2003, the brewery will also produce Carlsberg under license. The company also produces bottled water.

The brewery imported about 9,000 mt of malt in 2002, mainly from France. About 12,000 mt of hops were imported from Germany. Company officials are open to imports of these products from other countries, including the U.S. Rice, which is also used in the process, is imported from Thailand and Vietnam. Total imports of about 3,500 mt are expected in 2003. Eventually, the company plans to develop its own local rice production. Chemicals, packaging materials, and other key production inputs are sourced from Thailand.

Company officials report that the local beer market is growing due to growth in incomes, a switch in consumption from rice liquor to beer, and increasing tourism. The company also has a policy to keep prices low. About 60% of sales are in Vientiane and 40% in provinces. Local laws do not allow beer to be advertised directly, so Lao Brewery does supports many social programs in order to promote their products. As discussed in the Food Aid section below, this may be an opportunity for cooperation.

Lao Beer has been exported to the U.S. for the past three years, but the market is growing slowly. The main market is the U.S. Lao community. The company also exports to France, New Zealand, Japan, Vietnam, and Cambodia.

Company officials say that their biggest problem is the high transit costs of goods via Thailand. They note that the cost from Thailand's Klong Toey port in Bangkok to Vientiane is the same as from Klong Toey to U.S. ports. The Laos and Thai governments are negotiating to reduce these high charges, but there is little progress being made.

Other relatively large processing firms include the Gold Coin animal feed business and Wang Kanai sugar plant discussed above.

Overall, low consumer purchasing power, poor infrastructure, a lack of adequate social and institutional systems, and limited access to credit are the main constraints to further development of Laos' agricultural and food processing industry. Cooperatives, trade associations, and other key elements of the supply chain are also not well developed, but

the government is supporting activities to establish them.

### 3.5 Investment in Food and Agriculture

With the exception of Lao Brewery, Wang Kanai Sugar, and Gold Coin Feedmill discussed in the previous sections, as well as a few other examples, investment in Laos' agricultural and food processing sector has been extremely small in comparison to other ASEAN countries.

Public investment from both domestic and foreign sources in Lao agriculture is largely directed toward infrastructure, particularly irrigation development. Chart 23 shows total public investment in agriculture and irrigation from 1996-1999. While the overall level of agricultural and irrigation investment climbed from 7.64 billion Kip in 1996-97 to 45 billion in 1998-99, the percentage of investment in this sector fell from 12% to 7% over the period. Domestic investment in the agriculture sector was fairly high during the period, but nearly 80% of Laos' total public sector investment came from overseas development assistance. On average since 1995, over 60% of this investment in irrigation has been directed toward the central region, with Savannakhet and Vientiane municipal area receiving the majority of the development funding within that region.

Government statistics for 1997-1999 show that the agriculture, forestry, and wood processing sectors were granted direct private investment licenses totaling \$87.5 million in 1997, \$10.4 million in 1998, and \$66.1 million in 1999. However, actual foreign investment in these sectors is uncertain because government statistics reflect only the value of the licenses granted, not actual foreign direct investment flows.

There are many investment opportunities, but government and private sources interviewed for this study tended to emphasize those in the livestock and fisheries sector. This is primarily because livestock rearing has a long tradition in Laos and much of the country's terrain is well suited to this type of production. The government is also focusing on this sector because of the significant opportunities for backward and forward integration and the multiplier effects on local economies.

As part of this approach, the government is currently promoting the concept of "Area Wide Integration", which involves smallholder mixed farming systems utilizing crops, livestock, fish and tree plantations to attain equitable rural development, food security and environmental objectives. As part of this approach, the government wants to encourage smallholders to move towards commercial farming, or from subsistence farming to more diversified production. In this regard, they are looking for mechanisms to boost domestic and foreign investment in projects such as:

- Broiler chicken production and processing
- Egg production from hybrid layers,
- Breeding and fattening of pigs
- Ranches for more intensive beef, buffalo and milk production targeting domestic and export markets, particularly in Thailand and Vietnam. This includes integrating coffee, dairy, and beef production on the Bolavens plateau in Champassak province, to utilize the good climate, soil, infrastructure, and other resources of that region.
- Animal auctions centers, mainly for cattle and buffalos
- Modern slaughterhouses and other processing facilities in major towns, particularly Vientiane, Luangprabang, Savannakhet, and Pakse

- Fish sauce plants, integrating fish conservation and fish milling
- Fish farming for domestic and export by integrating fish ponds and cage culture, fish feed mills, fish conservation and marketing, and fish meat processing

Turning these opportunities into reality will be a difficult process, however, due to the many obstacles noted above.

### 3.6 Commercial Food Distribution and Consumption

#### 3.6.1 Distribution System

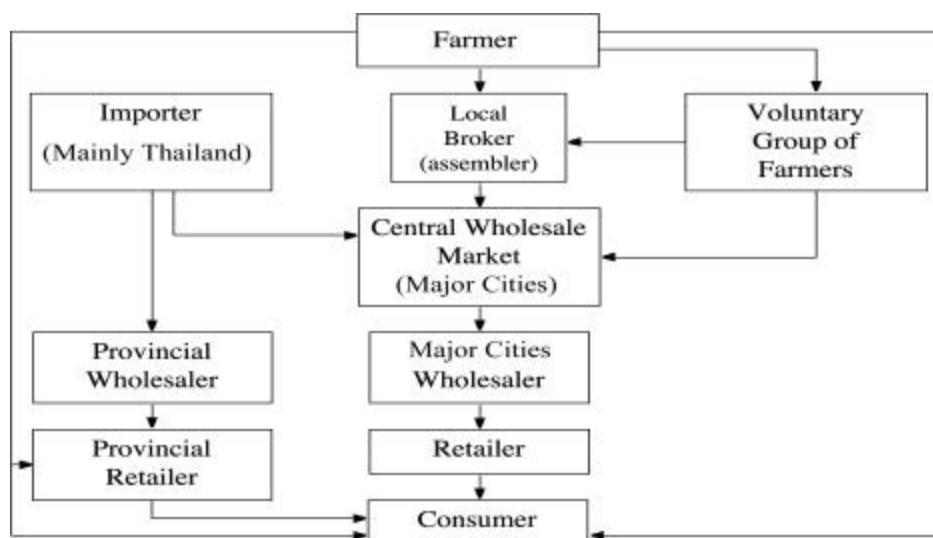
Laos' food and agricultural system is still quite under-developed, but the commercial distribution system is rather complex, particularly at the local and regional levels. This is mainly due to the surprisingly wide range of domestic and imported products being traded and the various channels in which these products are moving. This complexity is compounded by the fact that so many products are traded illegally along the land borders, particularly with Thailand, Vietnam, and China.

##### Mass Market Distribution

Chart 3 provides an overview of the movement of most domestic food and agricultural products, as well as some imported products, for the main consumer market. Further details are provided below about the import and distribution system for imported higher value food products.

For the mass market, there are essentially three widely used distribution channels. Wholesalers import products and then sell the goods to retailers. In some cases, the wholesalers provide delivery service, credit, and other support to small shops or stands in the local markets. Some sellers reach consumers through their own retail shops or via pickups or vans traveling throughout the country.

**Chart 1: Distribution System for Mass Market Food and Ag Products**



## Traditional Markets

Traditional wet and dry markets still play a dominant role in the distribution of most food products that Laotians use on a daily basis. Consumers in Vientiane support at least five large markets of this type, as well as dozens of other smaller neighborhood markets. Virtually every other city and town throughout the country has a similar traditional market system. It is estimated that at least 80 to 90% of the food products traded in the country are moving through this system.

## Supermarkets, Grocery, and Convenience Stores

There are no supermarkets or other large retail outlets in the country, but small grocery-convenience stores are found in Vientiane, and increasingly in Luangprabang, Savannakhet, Pakse, and other regional centers. These shops provide a wide range of mainly imported products to middle and higher income urban consumers, as well as tourists. This segment of the market includes mainly expatriates and medium-upper class Laotian consumers, estimated at less than 200,000 people nationwide. Thus, the market is still very small, even in relation to the total population.

Phimphone Minimart and Scooby Doo Minimart are two of the more popular outlets in Vientiane, but others also cater to this market. Most of these retailers arrange their own imports, often unofficially, but some products are also sourced from importer/distributors. Some U.S., French, and other higher end brands are carried in these stores. However, most imported products sold in the retail markets are from Thailand or Vietnam because they are cheaper and more suited to local consumer preferences.

The KP Group, formerly known as the Khambay Philaphandeth Company, is a leading importer and distributor to this segment of the market. They operate nationwide, with offices in Pakse, Savannakhet, Luang Prabang, and outlets in other provincial centers. The company is also involved in logging and saw milling; farms producing cattle, fruit trees, eucalyptus, and fish; construction; hotels, and other businesses. Their trading company is the local distributor for a number of imported brands, including Unilever, Best Foods, Kimberly-Clark, Coca-Cola, and others.

## Hotels and Restaurants

The Lao tourism industry is considered to be one of the most promising sectors of the economy, with good potential to generate both foreign exchange and incomes for workers in this industry. Trade contacts and media report that business was strong in 2001 and 2002, with about 700,000 tourists visiting the country in 2001 and an estimated 1 million in 2002. As of late 2002, the number of inbound tourists was projected to increase about 10% in 2003. With Thailand's tourist arrivals now at about 10 million per year, such a target may be achievable and Laos' tourism trade should continue to grow, particularly as the regional travel industry becomes more integrated.

This development is creating a sizeable market for imported food products used by hotels and restaurants. Most of this trade is concentrated in Vientiane and Luangprabang, with some demand in Vang Vieng, another popular spot for low budget travelers. There are efforts underway to expand the tourism sector to other regions and sites, but it will be some time before any significant change occurs.

In Vientiane, there are more than a dozen restaurants and five or six upper class hotels using imported foods. A similar number of restaurants and hotels serve mainly tourists in Luang Prabang. Most of these businesses arrange their own imports via importers-distributors based in Thailand, usually on a direct sale basis. Most of the products come into Vientiane via road or air from Thailand. Goods destined for Luang Prabang are imported directly from Chiang Mai, or via Vientiane.

Restaurant and hotel purchasing managers say that importing food products is always difficult due to problems with transportation, infrastructure, and Customs and Health officials. They noted that most of the Customs-related problems are on the Laos side of the border with Thailand, and that the problems are getting progressively worse. Tariffs and other regulations are strictly enforced and unofficial payments are necessary to ensure prompt service. One restaurant manager stated that each import shipment requires more than 20 government signatures and at least two weeks for delivery.

Importers and hotel purchasing managers report that most of the cheese sold in this trade is from France, the Netherlands, and Australia. Butter and other dairy products are usually sourced from New Zealand and Australia. Thai dairy products are usually not competitive in this market, but vegetables from Thailand are popular and of high quality. Several buyers noted that more than 50% of the fruits and vegetables consumed in Vientiane originate from Thailand. Thai beer is also very competitive. Fish is usually bought from local sources, although some of the hotels say there is good demand for imported salmon and other seafood. Some purchasing managers stated that they import salmon, crab, scallops, shrimp (fresh and salted), live seafood, and spring lobster from Thai suppliers in Bangkok. One buyer reported paying up to 1,500 baht (\$35) each for Thai lobsters. All wheat flour is imported from Thailand. There is no demand for U.S. French fries and potato products, as local potatoes are abundant and inexpensive.

Hotel buyers noted that price, followed by good quality and no thawing during transit are their most important factors in their meat buying decisions. For vegetables, the most important factors are standard size, color, and taste. Price is also the key factor influencing purchases of fish and seafood. The buyers report that most tourists prefer European-style and brands of dairy products, particularly from France, but price considerations usually force them to buy from Australia and New Zealand.

There are good opportunities for U.S. food and agricultural products to capture a greater share of this market. For example, U.S. beef is highly regarded, but it is not widely marketed due to strong competition from Australian and New Zealand beef and lamb. These products deserve higher levels of marketing and promotions in order to compete with similar products other origins.

Despite the high costs, the Lao Plaza Hotel in Vientiane is importing U.S. prime rib and beef strips in IQF portions, mainly for local expatriate clients. The purchasing manager stated that current monthly demand is about 200 kg in three consignments, but his U.S. beef sales would increase 30% if he had a better importing system. He noted that the main problem with using U.S. beef is a lack of consistent supply, which makes it difficult for him to manage inventory. He stated, "I need to have USDA price rib roast, but I sometimes have to settle for Australian."

Without a direct supplier locally, the Lao Plaza pays cash in advance to Siam Foods, a distributor in Bangkok. This system also has problems due to meats sometimes partially thawing during transit, as well as other quality control issues. The hotel buyer admits that



Laos is still a secondary market and is too small to justify local importing and distribution. He also notes that the government is not encouraging imports, and prefers to stress import substitution using local beef. However, local beef is rather low and inconsistent quality.

Hotel and restaurant purchasing managers in Luang Prabang are also interested in U.S. beef and other food products, but price is the main consideration to them. The buyer at one of the leading hotels in Luang Prabang stated that suppliers of U.S. products need to decrease their prices in order to compete, particularly with New Zealand and Australia. For example, he noted that T-bone steaks from the U.S. cost 610 Baht per kg (about \$14), while a similar product from New Zealand cost just 410 Baht (about \$9.50). Strip loins from the U.S. cost 830 Baht per kg, while New Zealand origin was only 390 Baht. This buyer also stated that he prefers U.S. beef and other products for quality, but New Zealand products are so much cheaper that he has little choice in what he buys. Similar comments were made about U.S. wines.

There is not a well-organized hotel and restaurant trade association in Laos yet, so increased promotional efforts will need to be done directly with the individual businesses.

Nearly all hotel and restaurant managers interviewed for this study said they are interested in seminars and training sessions to educate local staff about U.S. products and how to use them. With the hotel and restaurant trade growing so quickly, many of these local staff have only limited experience, so promotional events tied with educational seminars would be well accepted.

### 3.6.2 Consumer Profile

With annual per capita GDP at less than \$500 annually, the purchasing power of the vast majority of Laotians is still very low. Estimates of annual per capita GDP in terms of purchasing power in the United States is equivalent to around \$1,600. The vast majority of Laos' 5.8 million people exist on a traditional diet of rice, sometimes supplemented by fish, vegetables, and some meat. Basic appliances, such as refrigerators and microwaves, which are taken for granted in most other countries, still are out of reach for most Laotians, mainly because there is still no electricity in vast areas of the countryside. Thus, it will be many years before most Laotian consumers have the purchasing power to afford high volumes of imported products.

Despite this low purchasing power and population base, there is growing demand for some higher value imported food products. The biggest volume of these products is consumed by tourists, which was estimated to number about 700-800,000 in 2002 and rise to one million in 2003. Expatriates living in the country, as well as middle and upper income consumers, are also an important and growing base of demand. These consumers are concentrated in the major cities and their number is estimated at not less than 200,000 nationwide.

Interviews with hotel, restaurant, and supermarket purchasing managers reveal that these tourists and higher end consumers have generally the same basic preferences, in terms of diet, taste, products, brands, seasonality, etc, as their counterparts in Thailand, and to some extent, Vietnam. These consumers do not tend to be leaders in demanding or creating new preferences, but instead usually react to changes in the market environment as products, the overall economy, prices, market access, and other factors dictate. Much of this situation is due to the high levels of cross border trade, both legal and illegal, between Laos and its neighbors, particularly with Thailand.



Higher end Lao and foreign consumers have shown their preference for high value, good quality, and reasonably priced Western consumer goods. As noted above, some U.S. products are now available in groceries, convenience stores, and other retail outlets that are emerging. Several of these U.S. brands are produced in the region by Asian subsidiaries of U.S. companies, but some products are being imported via Thailand or other third countries. Any significant direct imports to Laos is likely to remain small for the foreseeable future, mainly due to the small size of the market and Laos' dependence on transportation companies in Thailand and Vietnam.

### **3.7 Food Aid**

Due to Laos' high numbers of impoverished people, poor rural infrastructure, and flooding that often occurs in many areas, there is still a significant need for food aid. Poor nutrition is a "silent emergency", with over 40% of the population living below the poverty line. The UN World Food Program's (WFP) vulnerability analysis shows that approximately 30% of the population have insufficient food for more than six months of the year and thus experiences ongoing food shortages and insecurity. Chronic malnutrition has been shown to affect over 45% of the population.

WFP is the largest organization involved in meeting these food aid needs, and is by far the largest recipient and distributor of US food aid in the country. In addition to WFP, many NGO's and other organizations are operating throughout the country on various small scale food and nutrition support programs. These organizations range from large multi-national programs, such as CARE, to small local NGO's that operate only in certain areas. Some of these organizations act as distributors for WFP food aid. However, most concentrate their efforts on support to local food and livestock production, nutrition education and training, and other village-based programs.

#### **3.7.1 World Food Program**

WFP efforts in Laos focus on:

- Promoting food security through establishing institutional capacity to respond to both national and household food insecurity;
- Better defining the problem and locations of hunger, poverty and critical food shortages through vulnerability analysis and mapping;
- Helping to assess the national nutrition situation and potential means for addressing critical deficiencies;
- Mitigating natural disasters;
- Enabling food-insecure households to better cope with setbacks by both maintaining their asset base and developing assets;
- Helping people shift to more sustainable livelihoods; and
- Promoting food security and enhancing the involvement in schools through school feeding initiatives.

In 2003, WFP projects that 5,172 tons of food, including 3,888 mt of grains (mainly rice from Thailand) and 1,284 mt of other foods, will be distributed through its programs.

WFP's "Primary Education for Girls and Boys in Remote Areas of Laos" project is a three-year campaign to build education and boost literacy rates. The program provides nutritious

meals to about 35,000 schoolchildren, including 15,000 girls, some of who are attending school for the first time. Beginning in August 2001 and scheduled to operate through 2005, the project aims to utilize over 7,300 tons of commodities and feed more than 69,000 children. The two main objectives are to:

- improve children's capacity to concentrate and assimilate information by relieving short term hunger;
- contribute to increased enrolment and attendance, reduce drop-out and repetition rates, and
- alleviate the gender gap in primary education.

The project will annually provide daily mid-morning snacks to about 52,000 primary students; monthly take-home rations for 25,800 primary school girls; and weekly rations to 7,800 "informal" boarders at primary schools. The project is targeted to districts where there is a high proportion of poor, vulnerable and food insecure households, where levels of education are low, and where gender disparities are considerable in education.

Another three-year project running through July 2003 is targeted at improvement of household food security. A total commitment of 8,644 tons of commodities has been pledged to this program that will benefit nearly 155,000 persons with little access to social services, who experience food shortages, or who rely on non-sustainable livelihood systems. The long-term objective of the project is to assist food-insecure villagers to become more self-reliant through village-based community development. Specifically, the project will:

- Improve access to food among poorer people;
- Decrease dependency on shifting cultivation;
- Increase access to arable land;
- Improve links to markets and services; and
- Mitigate effects of natural disasters through development of small scale irrigation works, dams, and weirs.

WFP also conducts emergency operations to assist people affected by floods. Their commitment in 2002 was 8,160 tons and was set up to benefit over 100,000.

In addition, WFP monitors food production and reserves, particularly for rice, across the country. Floods are a big and growing problem, mainly due to deforestation and changing weather patterns.

WFP is interested to work with USDA and other organizations to develop new programs, particularly school feeding and other activities that complement their existing programs. It is important that the planning process be synchronized with WFP's annual demand projections, which are usually set in October for the following year.

### **3.7.2 USDA Food Aid Programs**

Other than the U.S. government support to WFP, which is administered directly to WFP's offices in Rome, there are no USDA food aid programs operating in Laos.

In order to expand the scope of food aid and other development programs in Laos, particularly in a way that will reduce poverty and create jobs in private sector food and

agribusiness organizations, there is a greater need for cash funding than for physical commodities shipped from the U.S. Monetization is a commonly accepted means of generating these cash needs. However, the relatively small size of Laos' local market, or the desire to not disrupt domestic or regional markets, often makes monetization a rather tricky process in practice. Domestic monetization also has its problems.

Commodities selected for monetization must be carefully selected based on detailed studies of local and regional market conditions, in combination with the demands of specific projects the monetization is supporting. Rice is the most desired commodity by recipients of food aid in Laos, and would be the most easily monetized, but this could displace markets for local and Thai rice. Soybean meal, vegetable oils, wheat flour, and milk powder also appear to be acceptable for monetization, either directly in Laos on a relatively small scale, or in third countries in bigger volumes. Other U.S. bulk and intermediate commodities, such as cotton, pulses, hops, and malt may also be suitable for monetization, but the markets and other considerations must be studied more carefully.

Interviews with Gold Coin Feedmill suggest that soybean meal may have potential for local monetization totaling about \$1 million. This estimate assumes that Gold Coin's annual soybean meal imports of about 5,000 mt and priced at \$220 per mt could be monetized. There may also be opportunities for third country monetization in Thailand, the Philippines, and Indonesia, where demand currently exceeds 4 million tons annually. Much of this demand is filled by the U.S., so there is less risk of disrupting markets for third country suppliers. Similar third country monetization opportunities may exist in these countries for whole soybeans.

### **3.8 Agricultural and Trade Policy**

#### **3.8.1 Agricultural Policy**

With agriculture accounting for over 50% of GDP and employing over 80% of the population, policies that affect agriculture and commodity prices have wide reaching implications for the welfare of most Laotians. Thus, the government's goals for agriculture and the rural sector under its Medium Overall Strategy are to:

- strengthen participatory and sustainable agricultural and rural development,
- improve food security and farmers' living standards,
- reduce poverty by 50%,
- Increase rice production,
- stabilize shifting cultivation,
- stop opium growing,
- extend cash crop cultivation, and
- build infrastructure needed for further industrialization, particularly food processing and related industries.

Organic and chemical free production is also a priority in order to differentiate Lao products from those of neighboring countries.

Successful implementation of this policy will help to provide secure employment opportunities and consequently raise the standard of living of rural people.

As noted in section 3.5 above, a key priority area for agricultural investment is to progressively and sustainably increase smallholder livestock farming and fishery systems. Laos has potential comparative advantages in this sector over its neighbors, particularly in production of cattle, buffalos, and other large ruminants. The government is also focusing on this sector because of the significant opportunities for backward and forward integration and related economic multiplier effects.

As part of this policy, the government is currently promoting the concept of “Area Wide Integration”, which involves smallholder mixed farming systems utilizing crops, livestock, fish and tree plantations to attain equitable rural development, food security and environmental objectives. The policy aims to encourage smallholders to move towards commercial farming, or from subsistence farming to more diversified production. There are three main components to the policy:

#### Livestock Development Framework

Animal production management and farming systems, specifically -

- Statistics, herd management, and livestock management information
- Production cycles and livestock farming systems
- Production technologies

Animal feed -

- Pasture and fodder tree development
- Forage and animal feed processing technologies
- Development of concentrates, complete and supplementary feeds

#### **Genetics and reproduction -**

- Introduction of hybrids (layers, broilers, pigs, and other species)
- Development of crossbreeds
- Conservation and development of indigenous breeds

#### **Livestock products and by-products processing, marketing, and development of regulations**

Fisheries Development Framework, focusing on:

#### **Aquaculture and wetlands management -**

- Aquaculture development
- Wetland management and protection
- Brood stock development and seed production
- Technology development and dissemination
- Fish disease prevention, control and social impacts related to fish diseases
- Reservoir management

#### **Live aquatic resources research, assessment, and management -**

- Inventory of indigenous aquatic resources
- Habitats, migration, life cycle of important aquatic species
- Limnology and biology of important aquatic species and development of cultivable indigenous species
- Environmental and social assessment and monitoring
- Community awareness, empowerment, participation on aquatic resources management

#### **Post harvest technologies, regulations, and development of -**

- Traditional fish products

- Fish processing and marketing
- Post harvest loss technologies
- Aquatic resources regulations

Animal Health Framework, focusing on:

**Basic animal health delivery services -**

- Vaccination campaign
- Distribution and use of vaccines and veterinary products
- Expansion of veterinary network
- Training
- Establish cost recovery systems

**Veterinary drugs -**

- Vaccine production, research, and seed strain storage
- Veterinary drug research
- Veterinary clinic monitoring and organizing

Veterinary epidemiology and diagnostics -

- Epidemiology
- Disease diagnostic laboratory
- Vaccine seed strains conservation and quality control
- Animal health research projects

**Zoo-quarantine and inspection and regulatory framework**

These priorities highlight the biggest challenge facing the agriculture sector, which is to shift from a smallholder, subsistence economy to one that is more diversified and producing higher value products.

Even though agriculture and rural development is so critical to so many Laotians, policies are often not well defined or are poorly implemented at the local level. This is mainly due to low levels of public and private sector investment in the sector. However, as noted above, there has been increased public and private in recent years, with corresponding responses in agricultural yields and production.

International aid programs also support Laos' agricultural policies. In mid 2001, the World Bank approved a \$16.69 million 40-year loan for Laos' agricultural development. The main objective of the project is to reduce rural poverty by improving and increasing agricultural production. The project will (i) reinforce the government's program of decentralization and promote community-level involvement in implementation; (ii) strengthen institutional capacity; and (iii) emphasize "bottom-up" planning in designing and implementing components by adopting a strong participatory approach, involving the potential beneficiaries in the rural community, as well as the concerned departments of the government at the central and local levels.

### **3.8.2 Agricultural Trade Policy and Market Access**

## Trade Policy

As one of the least developed countries in Southeast Asia and being surrounded by five neighbors, Laos is attempting to transform itself from being a “landlocked” country to a “land link” between its Indochina neighbors. Another aim in this policy direction is to diversify its trading and investment partners to other countries in the region and away from its heavy reliance on Thailand.

However, there are still too many obstacles to increased trade. This has resulted in the current high levels of informal trade and smuggling, which makes it difficult to make Laos a truly effective “land link” between its regional neighbors. This also results in fewer benefits being accrued to the state.

There has been relatively little relaxation in trade controls since Laos joined ASEAN in 1997 and even since it applied for World Trade Organization membership in 1998. However, a more open agricultural trade environment should develop as Laos begins to take more of the steps needed to gain access to the WTO.

In the near term, the government is also seeking ways to promote agricultural production, both for domestic consumption and export.

## Tariffs

As noted in section 2.3.3 above, Laos’ import tax system aims to promote imports of materials and equipment for investment and production, while protecting domestic production and limiting luxury imports. Foreign investors are required to pay a 1% import duty on imports of machinery for production, equipment, and spare parts. Raw materials and intermediate goods needed for export production are exempt from import taxes. Raw materials and intermediate goods imported for import-substituting industries can be accorded special treatment based on an incentive agreement.

Customs regulations cover 3,552 tariff lines, with tariff rates ranging from 5% to 40%. More than half of these products are assessed at the 5% tariff rate and many others are assessed the 10% and 20% rates. Food products are usually taxed at the 20% and 30% levels. Additional taxes and fees are also assessed.

Besides import tariffs, the government also imposes excise taxes on a wide range of products. Beer is taxed at 50% and other alcoholic products are taxed at 60%.

Importers may also face a turnover tax of 5-10%. Most goods are assessed at the higher 10% rate, but goods considered essential to domestic production are assessed at 5%. Rice, fertilizer, and animal feed are tax-exempt. The Lao government is expected to introduce a value-added tax, which will eventually replace this turnover tax.

Reforms to many of these tariffs will likely come as Laos steps closer to WTO membership, and particularly as it becomes more integrated into ASEAN and the ASEAN Free Trade Agreement (AFTA). When the country became a member of ASEAN, it committed to a gradual reduction in most tariff rates to 0-5% by 2010 for trade with other ASEAN members. Along with Myanmar, Vietnam, and Cambodia, Laos committed to completely eliminate tariffs for nearly all products by 2015. The other six ASEAN members will eliminate their tariffs by 2010. Currently the decision making process with respect to AFTA mainly hinges on the timing at which different classes of goods will hit the 0-5 % target.

## Regulations and Other Market Access Issues

All goods imported to and exported from Laos are required to obtain licenses and must be declared to Customs offices. Application for an import license must be made to the provincial trade authority where the importing enterprise is located. An import license is valid for three months, during which time payment for imports and import duties should be made.

For general goods, importers are required to have the following documentation for each shipment:

- contract with a foreign supplier or purchase order;
- import license (7 copies);
- letter of credit or payment guarantee paper from a foreign exchange bank;
- transport documents;
- bill of lading;
- customs clearance (import) report.

Importers of raw materials for re-export are required to have the same documents as other importers, except for the contract and import license for each shipment. Instead, they are required to provide an annual import plan to the provincial or municipal Industry and Handicraft Department where the factory is located.

Exporters should have the following documentation when applying for an export declaration:

- application for export declaration;
- export permission from provincial trading authority;
- invoice;
- packing list;
- certificate of country of origin and generalized system of preferences certificate of origin if applicable;
- phytosanitary certificate for food exports; and
- industrial products certification for industrial products.

Products imported for the purposes of processing, assembly into finished products or for exhibition and subsequent re-export are exempt from duty.

Trans-shipment of goods through Laos requires all the documents normally needed for both importing and exporting. In addition, the export-import company shipping goods through Laos must submit an annual trans-shipment plan to the related ministry (e.g., Agriculture and Forestry for agricultural and wood products) and obtain further permission from the ministry for each trans-shipment. Goods traveling through Laos are not subject to import or export taxes.

To import or export pharmaceuticals, food and chemical products, in addition to the required documents mentioned above, importers must obtain a license from the Food and Drug Control Import Division of the Food and Drug Department of the Ministry of Public Health. More information can be obtained by contacting the Food and Drug Control Division, Food and Drug Control Department, of the Ministry of Health: Tel: (856) 21 214-013 or



014; fax (856) 21 214015.

Pre-shipment inspection is required for exported goods of any kind.

Laos has no special labeling or marking requirements.

Lao law prohibits imports of agricultural produce that is grown domestically in sufficient quantities (i.e., eggplant, tomatoes, bananas, chilies, lemons).

### 3.9 U.S.-Laos Agricultural Trade Statistics

Due to the high level of smuggling and other unofficial trade, there is little reliable data showing Laos' international agricultural trade. However, US trade figures provide some insights into agricultural trade between the two countries.

Table 3 shows that U.S. exports of agricultural, fish, and forestry products to Laos have been on a steady increase since 1997 and jumped to over \$1.4 million in 2002. This was led mainly by bulk commodities, which are primarily used in food aid programs. Other U.S. exports include a rather narrow range of products, with only wine and beer, red meats, and snacks showing reasonably consistent but small market demand. There has also been fairly regular demand for forest products, including hardwood lumber, panel products, and other value-added wood products. Bulk agricultural products were virtually nil from 1997-2001, but in 2002 this category dominated U.S. exports.

U.S. imports of agricultural, forest, and fish products are shown in Table 4. These shipments have been declining sharply, especially since 1999. Coffee was a leading Lao export item to the U.S. in 1997 and 1999, but shipments have dwindled in recent years. Forest products, including mainly logs and chips and value-added wood products, replaced coffee as the main imported products to the U.S. in 1998. However, these shipments have also declined steadily since 1999. There have also been some beer shipments in recent years.

**Table 3. U.S. Exports of Agricultural, Fish & Forestry Products to Laos ('000 \$U.S.)**

Product	1997	1998	1999	2000	2001	2002
<b>Bulk Agricultural Total</b>	-	-	-	-	7	1,082
Rice	-	-	-	-	7	-
Cotton	-	-	-	-	-	-
Tobacco	-	-	-	-	-	-
Other Bulk Commodities	-	-	-	-	-	1,082
<b>Intermediate Agricultural Total</b>	-	-	-	3	-	-
Soybean Oil	-	-	-	-	-	-
Vegetable Oils (Excl Soybean Oil)	-	-	-	-	-	-
Live Animals	-	-	-	-	-	-
Sugars, Sweeteners & Beverage bases	-	-	-	-	-	-
Feeds and Fodder, excl Pet Foods	-	-	-	-	-	7
Planting Seeds	-	-	-	3	-	-
Other Intermediate Products	-	-	-	-	-	-
<b>Consumer-Oriented Agricultural Total</b>	14	-	-	125	326	327
Snack Foods (Excl Nuts)	-	-	-	-	9	37
Breakfast Cereals Pancake Mix	-	-	-	-	-	-
Red Meats, Fresh/Chilled/Frozen	-	-	-	-	58	138
Red Meats, Prepared/Preserved	-	-	-	-	-	-
Poultry Meat	-	-	-	-	-	-
Dairy Products	-	-	-	4	-	-
Egg and Products	-	-	-	-	-	-
Fresh Fruit	-	-	-	-	17	-
Fresh Vegetables	-	-	-	-	-	-
Processed Fruit and Vegetables	-	-	-	-	87	-
Tree Nuts	-	-	-	-	-	-
Wine & Beer	-	-	-	121	161	152
Pet Foods (Dog & Cat Food)	-	-	-	-	-	-
Other Consumer-Oriented Products	-	-	-	-	-	-
<b>Forest Products (Excl Pulp and Paper)</b>	-	-	301	21	-	55
Hardwood Lumber	-	-	-	21	-	-
Panel Products, including Plywood	-	-	220	-	-	12
Other Value-added Wood Products	-	-	81	-	-	44
<b>Fish and Seafood Products, Edible</b>	-	-	-	-	-	-
Other Edible Fish and Seafood	-	-	-	-	-	-
<b>Agricultural Product Total</b>	14	-	-	128	333	1,417
<b>Agricultural, Fish and Seafood</b>	14	-	301	149	333	1,472

Source: U.S. Bureau of the Census Trade Data

**Table 4. U.S. Imports of Agricultural, Fish & Forestry Products From Laos ('000 \$U.S.)**

Product	1997	1998	1999	2000	2001	2002
<b>Bulk Agricultural Total</b>	291	-	119	-	-	47
Rubber and Allied Products	-	-	-	-	-	13
Raw Coffee	291	-	119	-	-	34
<b>Intermediate Agricultural Total</b>	35	-	11	-	35	-
Live Animals	-	-	-	-	35	-
Hides and Skins	-	-	7	-	-	-
Planting Seeds	-	-	4	-	-	-
Other Intermediate Products	35	-	-	-	-	-
<b>Consumer-Oriented Agricultural Total</b>	-	-	19	135	15	23
Snack Foods (Including Chocolate)	-	-	-	-	-	13
Wine and Beer	-	-	19	135	15	6
Other Consumer-Oriented Products	-	-	-	-	-	4
<b>Forest Products (Excl Pulp and Paper)</b>	5	176	206	102	58	69
<b>Logs and Chips</b>	-	167	138	-	24	22
Hardwood Lumber	-	4	14	-	28	9
<b>Softwood and Treated Lumber</b>	-	-	-	-	-	15
Panel Products, including Plywood	-	-	-	-	-	5
Other Value-added Wood Products	5	4	54	102	-	18
<b>Fish and Seafood Products, Edible</b>	26	4	102	22	3	13
Salmon, Whole or Eviscerated	1	-	-	-	-	-
Other Edible Fish and Seafood	25	4	102	22	3	13
<b>Agricultural Product Total</b>	326	0	150	135	50	70
<b>Agricultural, Forestry, Fish and Seafood</b>	357	180	457	259	111	151

Source: U.S. Bureau of the Census Trade Data

Bilateral trade in agricultural, forestry, and fishery products has been on a steadily rising trend in favor of the U.S., with a positive and strongly increasing net agricultural trade balance since 2001. However, if bulk commodities are excluded for 2002, U.S. exports for the period would have been up only slightly from 2001 to \$390,000 and Thai-Laos trade would have been nearly in balance. This highlights the importance of food aid shipments to U.S.-Laos trade during this period of Laos' economic development.

## Section IV. Best Prospects for U.S. Food and Agricultural Trade

### 4.1 Bulk Products

As noted in the previous section, bulk products have shown the strongest growth in U.S. exports to Laos in recent years. This trade has been dominated by products used for food aid programs. Given Laos' continuing need for food aid and the fact that the U.S. has been a significant donor of that aid, it's likely that bulk product exports will remain strong. However, there are commercial opportunities for other bulk products as well.

#### 4.1.1 Bulk Products for Food Aid

As noted in the previous section, bulk products have shown the strongest growth in U.S. exports to Laos in recent years. This trade has been dominated by products used for food aid programs. Given Laos' continuing need for food aid and the fact that the U.S. has been a significant donor of that aid, primarily through WFP, it's likely that bulk product exports will remain strong.

#### 4.1.2 Cotton

U.S. cotton exports have been nil over the past six years, but there is significant potential for these exports to jump sharply if the U.S. and Laos have normal trade relations and if Laos achieves WTO status. Both of these moves should increase the value of Laos' textile quotas in the U.S., and thus stimulate opportunities for U.S. cotton as raw material, either

as fabric or as yarn.

## **4.2 Intermediate Products**

### **4.2.1 Soybean Meal and Other Feed Ingredients**

Laos' feed milling industry is still small and dominated by only one local mill, Gold Coin. The mill's production capacity is 60,000 to 70,000 mt per year and storage capacity is about 4,000-5,000 mt. Total output of feeds for poultry, pigs, cattle, and fish is now only about 15,000 mt annually, so there is significant potential for expansion.

Gold Coin relies on soybean meal, meat and bone meal (MBM), rice bran, and corn as their main raw materials. About 95% of these materials are imported. Their monthly demand for soybean meal is about 300-400 mt. Most of this is imported from Singapore, as the price for Thai origin meal is about \$20-30 per mt more than from Singapore. Some of this soybean meal may already be U.S. origin. Another 200-250 mt per month of MBM is imported, currently from India and Australia.

Gold Coin's feed ingredient demand is miniscule in relation to imports by Thailand and other regional countries, but still reasonable given the still immature stage of Laos' livestock market. Laos' vast potential to expand livestock production and feed demand present new opportunities for U.S. soy meal and other feed ingredient exporters to differentiate their products and support the development of Laos' livestock industry.

As noted in section 3.7.2 concerning food aid, this rising demand for soybean meal may also present an opportunity for local monetization in order to expand U.S. food aid programs in the country.

### **4.2.2 Livestock Genetics and Breeding Stock**

According to a recent survey, Lao consumers ranked beef, duck, poultry, fish, and pork in order of preference as their preferred meats. Beef was apparently ranked highest in preference among 70% of the consumers surveyed. Laos also exports about 200,000 head of cattle annually to Thailand, primarily because it is less expensive to raise these animals in Laos than in Thailand. This indicates good opportunities for better livestock genetics and improved feeding to expand the industry.

The Lao government, various development aid projects, Gold Coin, livestock feed and animal genetics suppliers in Thailand, and other groups are working to develop Laos' livestock industry, particularly cattle, poultry, and swine. Providing higher quality genetics to local producers is a critical step in this process. Opportunities exist for U.S. companies to collaborate with these organizations to further develop this market.

### **4.2.3 Hops, Malt, and Other Beer Industry Ingredients**

Lao Brewery, the only beer producer in the country, notes that demand for beer is strong and growing steadily. Reports of smuggled products from neighboring countries, as well as U.S. trade data, support this view. To meet growing demand, Lao Brewery has recently upgraded its factory by adding a new automatic brew house and new packaging lines. Current annual production is 600,000 hectoliters, with a capacity of one million hectoliters.

The brewery imported about 9,000 mt of malt in 2002, mainly from France. About 12,000 mt of hops were also imported from Germany. Company officials are open to imports of these products from the U.S., so there appear to be good opportunities for U.S. suppliers to capture a share of this growing market.

#### **4.2.4 Vegetable Oils**

Although U.S. exports of vegetable oils since 1997 are negligible, some buyers report that the demand for oil in commercial markets and for food aid will remain strong. They point to the fact that Laos currently has no domestic oil crushing or refining industry, as well as rising consumption among the general population and in the hotel and restaurant trade.

### **4.3 Consumer-Oriented Products**

Exports of U.S. consumer products to Laos, as a group, have not been as large as bulk products in recent years, but they have displayed the most consistent demand and growth. Annual demand from the U.S. climbed to over \$300,000 in 2001. Total imports are significantly more due to the high levels of smuggling of these products and the high values involved. Moreover, this sector represents solid commercial business, as few of these products are destined for food aid.

#### **4.3.1 Wine and Beer**

The comments above concerning demand for beer industry ingredients allude to the fast-growing market for imported wines and beer. There are high volumes of smuggling in this trade as well, so total imports are impossible to estimate. Hotel and restaurant buyers say that most of their customers prefer European (mainly French) and Australian wines, but there is potential for U.S. wines to capture a bigger share of the market. U.S. exports of wine and beer to Laos have averaged about \$145,000 annually since 2000 and shipments in 2001 and 2002 exceeded \$150,000. Although still small in total, there is healthy growth in this market.

#### **4.3.2 Meats and Poultry**

Total official red meat and poultry exports to Laos from the U.S. totaled \$58,000 in 2001 and \$138,000 in 2002. The actual trade of products from the U.S. and other origins is probably significantly more due to transshipments from Thailand and smuggling. Most of this increase is due to the growing importance of Laos' tourism industry.

Several hotel buyers interviewed for this assessment said that they would like to use more U.S. beef if it is competitively priced with Australian beef. The purchasing manager and chef at the Lao Plaza Hotel, one of the leading hotels in Vientiane, also reported that they have regular and growing demand for U.S. beef, even if it is more expensive than beef from other origins. They are particularly interested in collaborating with U.S. exporters and other hotel buyers to set local cold storage facilities so that larger volumes can be imported and shipping costs can be reduced. However, until the buying power of more Laotians expands, increased demand for imported meats will remain illusory.

#### **4.3.3 Other Consumer Products**

There is rising demand for a full range of other high-value consumer food products, particularly in the hotel and restaurant trade which serves the tourism industry. Snack

foods, dry or canned fruits and vegetables, and other items also appear to be in demand in the retail grocery trade.

## SECTION V. KEY CONTACTS & FURTHER INFORMATION

The USDA Foreign Agricultural Service in Bangkok, Thailand maintains up-to-date information covering food and agricultural import opportunities in Thailand and would be pleased to assist in facilitating U.S. exports and entry to the Thai market. Questions or comments regarding this report should be directed to the Foreign Agricultural Service in Bangkok at the following local or U.S. mailing address:

<b>Local:</b> Office of Agricultural Affairs Embassy of the United States 120- 122 Wireless Road Bangkok 10330 Tel. +662-205-5106 Fax. +662-255-2907 Email: <a href="mailto:Agbangkok@fas.usda.gov">Agbangkok@fas.usda.gov</a> Home page: <a href="http://www.fas.usda.gov">http://www.fas.usda.gov</a>	<b>U.S. Mail:</b> Office of Agricultural Affairs U.S. Embassy Box 41 APO, AP 96546
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End of Report.